

ABSTRACT OF THE DISCLOSURE

In a recording layer, a recording track is provided in the form of concentric circles or a spiral along a moving direction of a recording spot. When only specific Fourier transform components in a Fourier transform image of signal light are recorded, a width of the recording track provided in the recording layer is set corresponding to a diffraction order of the Fourier transform component to be recorded. That is to say, according to the diffraction order of the Fourier transform component to be recorded, the width of the recording track is determined within the range satisfying the following relationship. Here w is the width of the recording track, d is a length of one side of one-bit data of the signal light, λ is a wavelength of the signal light, F is a focal distance of a lens system, and n is an integer of 2, 3, or 4.

$$\frac{\lambda F}{d} \leq w \leq \frac{n\lambda F}{d}$$